

WHAT IS CLAIMED IS:

5 1. A light emitting panel assembly comprising a light emitting panel member for receiving light from a light source, the panel member having at least one light emitting surface, two or more separate parts or modular components, and a pattern of light extracting deformities on or in one or more of the parts or components for providing a desired light output distribution from the light emitting surface.

10 2. The assembly of claim 1 further comprising a structural member for supporting the parts or modular components.

15 3. The assembly of claim 2 wherein the structural member comprises a tray for receipt of the parts or modular components.

 4. The assembly of claim 3 wherein the tray provides a back reflector for the panel member.

20 5. The assembly of claim 1 further comprising a film overlying at least a portion of one side of the panel member to change the light emitted from the panel member in a predetermined manner.

25 6. The assembly of claim 1 wherein the deformities vary in at least one of the following characteristics: size, shape, position, placement, density, height, depth, angle and orientation.

30 7. The assembly of claim 1 wherein at least some light from the light source travels from at least one of the parts or components to another of the parts or components.

 8. The assembly of claim 1 wherein the light source is a fluorescent lamp.

9. The assembly of claim 1 wherein the light source comprises two or more light emitting diodes.

5 10. A light emitting panel assembly comprising a modular light emitting panel member having one or more light sources and two or more light output areas, and a pattern of light extracting deformities on or in the panel member that vary in size, shape, position, placement, density, height, depth, angle or orientation for providing a desired light output distribution from the light output areas.

10 11. The assembly of claim 10 further comprising a structural support for supporting the panel member.

15 12. A light emitting panel assembly comprising a light emitting panel member having a light emitting surface, the light emitting panel member being made of more than one modular component, and at least one light source for each modular component.

20 13. The assembly of claim 12 further comprising a tray for supporting the modular components.

14. The assembly of claim 13 wherein the tray acts as a reflector for the panel member.

25 15. A light emitting panel assembly comprising a light emitting panel member for receiving light from a light source, the panel member being formed of two or more inserts, components or parts, a pattern of light extracting deformities on or in one or more of the inserts, components or parts for providing a desired light output distribution, and a structural member for holding, positioning or
30 supporting the inserts, components or parts.

16. The assembly of claim 15 wherein at least two of the inserts, components or parts are shaped to mate with one another.

17. The assembly of claim 16 further comprising a reflector between at least one mating surface between two of the inserts, components or parts.

18. The assembly of claim 15 further comprising at least one film or substrate in close proximity to at least one side of the panel member to change the light emitted from the panel member in a predetermined manner.

19. The assembly of claim 18 wherein the film or substrate has deformities on or in at least one surface of the film or substrate.

20. The assembly of claim 19 wherein the deformities on or in the film or substrate have prismatic or lenticular surfaces.

21. The assembly of claim 15 wherein at least one single piece of film or substrate overlies two or more inserts, components or parts of the panel member.

22. The assembly of claim 15 wherein the structural member comprises a tray.

23. The assembly of claim 22 wherein the tray acts as a reflector for the panel member.

24. The assembly of claim 15 wherein at least some light travels from at least one of the inserts, components or parts to another of the inserts, components or parts.

25. The assembly of claim 15 wherein the deformities vary in at least one of the following characteristics: size, shape, position, placement, density, height, depth, angle and orientation.

5 26. A light emitting panel assembly comprising a light emitting panel member having a light emitting surface and a light transition area, the panel assembly including two or more components or parts that make up at least one of the light emitting surface, the light transition area, and the panel member.

10 27. The assembly of claim 26 further comprising a structural member for holding, positioning or supporting the components or parts.

 28. The assembly of claim 27 wherein the structural member acts as a reflector.

15 29. The assembly of claim 26 wherein at least some light travels from at least one of the components or parts to another of the components or parts.

 30. The assembly of claim 26 further comprising one or more light
20 emitting diodes for supplying light to the light transition area.

 31. The assembly of claim 30 wherein the light emitting diodes are multicolored light emitting diodes that provide different colored light that is mixed in the light transition area to produce a desired colored light output distribution
25 from the light emitting surface.

 32. A light emitting panel assembly comprising a light emitting panel member having one or more light emitting surfaces, the light emitting panel member being made of multiple parts or modular components supported by a
30 structural member.

33. The assembly of claim 32 wherein the structural member acts as a reflector for one or more of the parts or components.

5 34. The assembly of claim 30 wherein the structural member comprises a tray that receives the parts or components.